A scientist from Mars has just arrived in the San Diego area. The Martian scientist is learning to speak English, and she wants very much to sound like an ordinary speaker of English. Right now, the Martian scientist is having problems making plurals. Plurals are used when we talk about more than one of something. For example, the plural of cat is cats, and the plural of day is days. The Martian scientist does not know how to pronounce plurals correctly.

1. The Martian scientist listened carefully to English speakers’ pronunciation of some plurals. She noticed that the plural endings sounded like the last sound in the word buzz. For example, say the following sentences aloud. Concentrate on the sound of the plural endings of the underlined words.

   There are bugs on this plant.
   The pears are rotten.
   There are two birds in the sky.

On the basis of such data, the Martian scientist made up a simple hypothesis: Add a Z sound to a word to make it plural. If the Martian scientist follows this hypothesis to make plurals for the words below (and similar words), will she sound like us? Why or why not?

   pig  rat  judge  rock
   lunch  cloud  shape  star

2. The Martian scientist heard someone say the sentences shown below, and noticed differences in the way the plural endings of the underlined words sound. Say the sentences aloud. Concentrate on how the plural endings of the underlined words sound.

   All of the spoons and cups and dishes are on the table.
   There are goats and horses and cows on the farm.

Some of the plural endings sound the same. Which of the underlined words have plural endings that sound the same?

3. Say the plurals for the following words aloud. Listen to how the plural endings sound.

   graph  myth  wish  lunch  rock  shape
   rib  room  snake  star  tree  dove
   cloud  law  kiss  watch  lie  breeze
   box  bus  rat  bell  judge  pig
   toe  bush  hen  fuse  day  crew

Put the words into groups according to how their plural endings sound.

* This problem and the next are adapted from Maya Honda and Wayne O’Neil’s article, “Triggering Science-Forming Capacity through Linguistic Inquiry,” which appears in The View from Building 20, edited by Ken Hale and Samuel Jay Keyser, pp. 229-255. (MIT Press, Cambridge, 1993.)
4. Look at your answers to problems #2 and #3. Think about what your work shows about how we make plurals. Formulate a simple hypothesis that will help the Martian scientist say plurals so that she sounds like any ordinary speaker of English. (Hint: Say the words in each group without adding their plural endings. Listen to the final sound of each word.)

5. If the Martian scientist follows your hypothesis, will she be able to make plurals that sound “right”? Why or why not?

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**Past Tense Formation**

The Martian scientist has come to understand many things about the English language. But now she is having problems making the past tense for words. The past tense is used when we talk about something that has already happened. For example, the past tense of kick is kicked, and the past tense of smile is smiled. The Martian scientist does not know how to form the past tense.

1. The Martian scientist listened carefully to English speakers’ pronunciation of past tense forms, and heard the sentences shown below. She noticed differences in the way the past tense endings of the words sound. Say the sentences to yourself. Concentrate on the sound of the past tense endings of the words.

   *He cried and stomped his feet, and sounded awfully upset.*
   *She jumped up, climbed a tree, and waited at the top.*

   First put the underlined words into groups according to the sound of their past tense endings. Then think of a way to write the sound of the past tense endings, and label the groups.

2. Say the simple past tense of the following words to yourself. Listen to how the past tense endings sound.

   - walk
   - rob
   - kiss
   - knead
   - shout
   - flip
   - treat
   - laugh
   - play
   - raid
   - buzz
   - hug

   Put these words into groups according to how their past tense endings sound.

3. Look at your answers to #1 and #2. Think about what the data show about how we make the simple past tense. Formulate a hypothesis that will help the Martian scientist say the past tense of words so that she sounds like a native speaker of English. (Hint: Think of how the words in each group sound without adding their past tense endings.)

4. If the Martian scientist uses your hypothesis, will she be able to pronounce the past tense of words so that she sounds like a native speaker of English? Why or why not?

Write up your work in the form of a short essay addressing all of the above questions and points. Don’t simply answer each question in turn — unify your answers with prose that (a) introduces the problem, (b) outlines the data, (c) sets forth your hypothesis, (d) provides additional evidence for your proposal, if any, and (e) concludes with a summary. Any questions? Ask.